

ABSTRACT OF THE DISCLOSURE

A positive active material for the non-aqueous electrolyte secondary battery comprising a lithium-nickel composite oxide represented by the compositional formula

5 $\text{Li}_a\text{Ni}_{1-b-c}\text{Co}_b\text{Mn}_c\text{O}_2$ ($a \leq 1.09$, $0.05 \leq b \leq 0.35$, $0.15 \leq c \leq 0.35$, and $0.25 \leq b+c \leq 0.55$). BY the X-ray diffractometry with the $\text{CuK}\alpha$ ray, the lithium-nickel composite oxide exhibits an intensity ratio R ($(I_{012} + I_{006})/I_{101}$) of not greater 0.50, wherein R is the ratio of the sum of the

10 diffraction peak intensity I_{012} on the 012 plane and the diffraction peak intensity I_{006} on the 006 plane to the diffraction peak intensity I_{101} on the 101 plane. The crystallinity of the positive active material of the compositional formula $\text{Li}_a\text{Ni}_{1-b-c}\text{Co}_b\text{Mn}_c\text{O}_2$ can be kept high and

15 it is possible to secure the good capacity density and cycle life performance.